ABSTRACT OF THE DISCLOSURE

An image data manipulation system is described in which users located remotely from an image data storage library may participate in a collaborative image data rendering and evaluation session. The system includes the exchange of state parameters between the client computer of a user controlling the image rendering, the session driver, and a server computer which relays updated state parameters to other client computers participating in a session. The state parameters are used to update the view on each users computer to keep all the displays of the participants in synch with that of the session driver. The server processes extensive image rendering task for which the remote clients are not equipped and transmits newly-processed image data to the clients as appropriate. One embodiment for educational applications utilizes pre-stored image data sets which eliminates the need to transmit large blocks of image data over a network during a collaborative session.